

What Ails Us About High Frequency Trading?

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A Themis Trading LLC Mini White Paper

"What the _____ is going on?" our client asked. "This is screwing our investors!"

It was the mid 1990s and it was our first experience with High Frequency Trading (HFT), which has since grown to become one of the hottest controversies in securities trading today. Our client was a classic, buy and hold institutional investor, managing money for 401ks and pensions. At the time, we were agency institutional traders working at Instinet.

Our client had begun to notice how the Instinet top-of-book, which was not part of any national quote, was generating automated orders from a handful of firms that shadowed our institutional clients. These automated orders would match or better our clients' orders by an eighth or sixteenth (no decimals back then).

"Why is it that every time I put in an order in ABCD, these guys go behind me, or bid ahead of me, and when I cancel, they do, too?" our client asked. "They are forcing me to pay more to buy or sell for less!" So began our mission to help institutional investors cope with challenges created by HFT. Since HFT represented only about 15% of the volume until about the mid-2000s, it was a manageable situation.

Then something happened.

We began to notice a greater amount of "wobble" in stock prices when we traded for clients. Our clients would lament to us as well, even as they traded their own orders. Daily we heard how trading had become like a cage match. Daily our clients would detail how they would have to explain to their portfolio managers why they were light on volume. Why they got only 2,400 shares bought, with the stock \$1.50 higher on only 16,000 shares.

What we learned amazed us. HFT was now accounting for as much as 50-70% of the volume. And under every rock we turned, we found HFT engaged in: (1) what clearly looked like a questionable practice that cost institutional investors money, or (2) raised questions whether HFT was enjoying an unfair advantage versus classic institutional investors.

In response, we alerted our clients to what we learned. Eventually, others began to raise questions, too, including Senators Kaufman and Schumer. The SEC proposed banning the practice of flash orders, and has begun to look into other areas, such as dark pools, co-location, and how technology and automated trading have changed the market. HFT is categorized by the rapid trading of thousand of orders systematically and automatically, by computers analyzing instantaneous changes in prices and quotes. We have three issues with HFT.

HFT's Dominance May Be Affecting the Health of the Market

First, at an estimated 50-70% of all equities volume, HFT has gotten much too large for the marketplace. HFT volume has exploded because of regulatory rule changes, technological innovations, exchanges going for-profit and a global stock market sell off that decimated traditional volume. It is here and now, with HFT so prevalent in this current marketplace, that institutional traders have begun to feel HFT's negative effects in such disproportionate ways.

While we accept HFT's presence and tolerate it at a "normal" rate and existence in the market, at today's extremely high presence, it deserves a commensurate amount of attention.

We offer this analogy: The market is like an ocean. To the extent that there are many different trading styles and participants trading against and interacting with each other, the market is healthy, like an ocean teeming with many species. But when one participant accounts for so much volume, something is out of balance, the same as an ocean where one of its more predatory species, such as a shark, becomes the dominant inhabitant.

HFT Predatory Trading Taking Advantage of Unfair Practices

The second issue we have with HFT is with the predatory aspects of its practice as opposed to HFT rebate-driven and mean reversion trading. HFT predatory algorithms are proprietary trading engines that are designed to detect meaningful order flow in the market, and trade around it. If all market participants had equal access to all public quotes and trade prints at the same time, one would make the argument that it is just a highly efficient form of day trading. However, if one group of participants had access to order flow before others, or makes use of "internalization" dark pools for predatory purposes, then those participants, with their low latency, co-located servers, would have an unfair advantage in the marketplace.

While we believe the NYSE study that demonstrates that the top large cap stocks have benefitted from HFT with increased quote sizes and narrowed spreads, we believe smaller capitalization stocks have suffered with wider spreads, smaller quote sizes, and more volatility.

In the smaller and more difficult trading names of the small and midcap universe, no one extols the virtues of HFT liquidity. Instead, you hear traders cursing as offers get lifted impossibly ahead of them, just as they decide to lift it, due to predatory algorithms. The SEC has taken a first major step in controlling predatory trading with its proposed ban of flash order types. Flash orders were a carrot dangled by for-profit market centers in front of high volume players to entice them to play in one exchange's sandbox over another's. HFT proponents argued flash orders were no different than the old stock exchange floor, where some players got to see or overhear floor brokers before trades hit the tape.

We have a different analogy. Imagine you are at the grocery store. You take your cart to one of five apparently empty checkout lines. Suddenly, nine carts instantaneously appear ahead of you. You scratch your head and move to lane two. The same thing happens. You soon find that whenever you move into a new lane, a multitude of carts appear ahead of you in line.

Why? Because the supermarket has sold the right for those carts to do so. Thus, you can never be at the head of the line, no matter what you do, short of paying the exchanges a large fee to have that same right to cut someone else. In real life, this enabled HFTs to turn around and buy or sell stock to you for a penny or two more or less than the market was before you submitted your order. Thus, you could never obtain a real NBBO on a reliable basis.

Originally, flashing was defended as offering price improvement to the "flashee" or as being inconsequential (only 3-5% of executions are the result of flashing, which takes no account of flashed orders that did not buy or sell at the intended price due to being beat to the quote). However, as soon as politicians and regulators began to look at it, and understand it for what it was, nearly all those defenders have reversed themselves, and now say flashing is wrong.

Given that flash was instituted by major exchanges and market centers knowing its unfair nature, what other innovations of recent years are similarly unfair in their nature, and contrary to the public's interest? While many dark pools are valuable to all investors, and certainly to large institutions and mutual funds that need to source liquidity in the ever increasingly fragmented marketplace, there is one class of dark pools whose value we question, namely the "internalization" pools.

What toxic and proprietary flow swims in these pools, designed to sniff out intentions of the buy side? Is this desirable? Is the trade-off (of meaningless 5/1000ths of a penny price improvement on 186 shares) worth the opacity we are accepting? Are these pools contrary to Reg ATS, and fair and equal access to prices by all investors (and not just the fastest)? Are these pools fed automatically by your trading system's router? These are valid questions, whose debate we believe would be valuable for the public, similar to the flash debate.

HFT Trading Possibly Affecting Asset Valuations

The third issue we have with HFT is that we are concerned that it is causing a disconnect between market prices and real asset values. As everybody knows, the value of security assets are based on the pricing established every day by market trading. But shouldn't we be wary of the pricing of a good if 70% of the transactions taking place are done by a few very large players? Would you prefer to buy a diamond in a marketplace controlled by one family, or in a marketplace of controlled by many players? Given the wild volatility in the oil market in the past few years, and now in currency, commodity, food and securities, are we avoiding examining another systemic risk?

To conclude, we are not anti-progress or anti-technology. Our entire careers have been spent at firms that have innovated with technology. And we have no issue with any firms desire to spend whatever they wish for better technology. However, we do have an issue if that technology is combined with unfair practices to give an advantage to one group at the expense of the general public.

Finally, we believe in balance. If we were charged with making sure our markets are fair for everyone, and a model for the world to emulate, we would examine whether a model and successful marketplace is defined solely by whether or not it has the speed to execute a million orders per second. While we believe in free markets, giving up fairness and equal low cost access for all might be a steep price to pay for sub-penny price improvement and increasingly opaque and multi-tiered markets.

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